

### Amendments to the Claims

1-12. (cancelled)

13. (previously presented) The device as set forth in claim 15, further comprising a storage unit for storing a geometric structure of the joint and/or reference values for determining the aperture angle.

14. (previously presented) The device as set forth in claim 15, further comprising a data output device for outputting the ascertained aperture angle.

15. (currently amended) A device for determining an aperture angle of a joint, said device comprising:

a robot for applying a force in a prescribed direction to the joint and a force measuring device coupled to the robot for ~~applying defined forces in defined directions onto~~ measuring the force applied by the robot to the joint;

a detection device for detecting (i) positions of joint components forming the joint and/or (ii) positions of structures connected to or to be connected to the joint; and

a computational unit for receiving data from the force measuring device and detection device and for ascertaining from said data the aperture angle of the joint for a particular applied force based on the detected positions and the measured force.

16. (previously presented) The device as set forth in claim 15, ~~wherein the force measuring device~~ wherein a display is provided for automatically displays displaying the applied force measured by the force measuring device.

17. (currently amended) A device for determining an aperture angle of a joint, the device comprising:

a force applying device ~~that applies defined forces in defined directions for use in~~ applying a force in a defined direction to the joint and/or to structures connected ~~to or to be connected~~ to the joint;

a force measuring device coupled to the force applying device that measures forces applied by the force applying device to the joint and/or to the structures connected ~~to or to be connected~~ to the joint;

a detection device that detects positions of joint components and/or positions of structures connected to or to be connected to the joint; and

a computational unit in data communications with the ~~force applying device~~, the force measuring device and the detection device, the computational unit ~~ascertaining~~ being configured to ascertain the aperture angle of the joint based on the detected positions in relation to the force measured by the force measuring device, whereby the aperture angle of the joint can be ascertained for a particular applied force.

18. (previously presented) The device as set forth in claim 17, wherein the force applying device comprises a robot.

19. (previously presented) The device as set forth in claim 17, wherein the force applying device comprises a manually-operable force applying device.

20. (previously presented) The device as set forth in claim 17, wherein the detection device detects how far a joint or structure connected to the joint moves when a particular force is applied.

21. (previously presented) The device as set forth in claim 17, further comprising reference markers attached to the joint and/or the structures connected to ~~or to be connected~~ to the joint, wherein the detection device detects positions of the reference markers.

22. (previously presented) The device as set forth in claim 21, wherein the computational unit registers the joint and/or the structures connected ~~to or to be connected~~ to the joint based on the detected positions of the reference markers.

23. (previously presented) The device as set forth in claim 17, further comprising a display, wherein the computational device provides a visual representation of the ascertained aperture angle for viewing on the display.

24. (new) The device as set forth in claim 17, wherein the computational unit is operative to compare the ascertained aperture angle to a previously recorded reference value for a particular applied force in the defined direction.